

Picture Tube

NO ION-TRAP MAGNET REQUIRED
MAGNETIC FOCUS 70° MAGNETIC DEFLECTION

ELECTRICAL

Direct Interelectrode Capacitances

Cathode to all other electrodes	5	pF
Grid No.1 to all other electrodes	6	pF
External conductive coating to anode	{ 750 max 500 min	pF
Heater Current at 6.3 V.	600 ± 30	mA
Electron Gun	Type Requiring No Ion-Trap Magnet	

OPTICAL

Phosphor P4—Sulfide Type, Aluminized
For curves, see front of this section

Faceplate. Filterglass
Light Transmission (Approx.) 73%

MECHANICAL

Weight (Approx.)	24 lb
Overall Length	22.438 ± 0.375 in
Neck Length.	7.500 ± 0.188 in
Projected Area of Screen	224 sq in
External Conductive Coating	

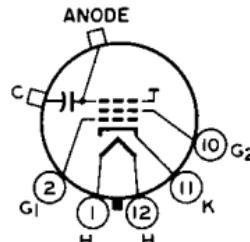
Type Regular-Band
Contact area for grounding Near Reference Line

For Additional Information on Coatings and Dimensions

See Picture-Tube Dimensional-Outlines and Bulb J165 Z sheets
at front of this section

Cap.	Recessed Small Cavity (JEDEC No.JI-21)
Base	Small-Shell Duodecal 5-Pin (JEDEC Group 4, No.B5-57)
Basing Designation for BOTTOM VIEW	12N

- Pin 1—Heater
- Pin 2—Grid No.1
- Pin 10—Grid No.2
- Pin 11—Cathode
- Pin 12—Heater
- Cap—Anode (Grid No.3,
Screen
Collector)
- C—External
Conductive Coating



MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES

Unless otherwise specified, voltage values
are positive with respect to cathode

Anode Voltage.	20000 max	V
Grid-No.2 Voltage.	550 max	V
Grid-No.1 Voltage		
Negative peak value.	220 max	V
Negative bias value.	155 max	V
Positive bias value.	0 max	V
Positive peak value.	2 max	V



21WP4B

Heater Voltage { 6.9 max V
 5.7 min V

Peak Heater-Cathode Voltage

Heater negative with respect to cathode:

During equipment warm-up period not exceeding 15 seconds. 450 max V

After equipment warm-up period 200 max V

Heater positive with respect to cathode:

Combined AC and DC voltage 200 max V

DC Component 100 max V

TYPICAL OPERATING CONDITIONS FOR GRID-DRIVE SERVICE

Unless otherwise specified, voltage values are positive with respect to cathode

Anode Voltage. 16000 V

Grid-No.2 Voltage. 300 V

Grid-No.1 Voltage. -28 to -72 V

For visual extinction of focused raster

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance 1.5 max MΩ

For X-radiation shielding considerations, see sheet

X-RADIATION PRECAUTIONS FOR CATHODE-RAY TUBES

at front of this section

